



WB6546 TIG WELDING WIRE

Classifications	AWS A5.28: ER90S-B91 BS EN ISO 21952-A: W CrMo91																																										
Product Description	Copper coated, modified 9% Chromium / 1% Molybdenum / V / Nb solid TIG wire.																																										
Applications	WB6546 is suitable for welding modified 9%Cr 1%Mo creep-resisting steels. Used mainly by the power engineering industry for headers, steam piping and turbine rotors. Typical material grades:- ASTM A213 T91, A387 Grade 91, A335 P91, A182, A336 F91. DIN X10CrMoVNb 9 1, 1.4903																																										
Wire Composition (Wt. %)	<table border="1"> <thead> <tr> <th></th> <th>C</th> <th>Mn</th> <th>Si</th> <th>S</th> <th>P</th> <th>Ni</th> <th>Cr</th> <th>Mo</th> <th>Cu</th> <th>V</th> <th>Al</th> <th>Nb</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>min.</td> <td>0.07</td> <td>0.40</td> <td>0.15</td> <td>-</td> <td>-</td> <td>0.40</td> <td>8.0</td> <td>0.85</td> <td>-</td> <td>0.15</td> <td>-</td> <td>0.02</td> <td>0.02</td> </tr> <tr> <td>max.</td> <td>0.13</td> <td>1.20</td> <td>0.50</td> <td>0.010</td> <td>0.010</td> <td>0.80</td> <td>10.5</td> <td>1.2</td> <td>0.2</td> <td>0.30</td> <td>0.04</td> <td>0.10</td> <td>0.07</td> </tr> </tbody> </table>		C	Mn	Si	S	P	Ni	Cr	Mo	Cu	V	Al	Nb	N	min.	0.07	0.40	0.15	-	-	0.40	8.0	0.85	-	0.15	-	0.02	0.02	max.	0.13	1.20	0.50	0.010	0.010	0.80	10.5	1.2	0.2	0.30	0.04	0.10	0.07
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All-Weld Metal Mechanical Properties	<table> <tr> <td>Ultimate Tensile Strength</td> <td>N/mm²</td> <td>620 Min.</td> </tr> <tr> <td>Yield Stress/0.2% Proof Stress</td> <td>N/mm²</td> <td>415 Min.</td> </tr> <tr> <td>Elongation on 4D</td> <td>%</td> <td>17 Min.</td> </tr> <tr> <td>Impact Energy CV @ +20°C</td> <td>Joules</td> <td>220 Typical</td> </tr> <tr> <td>PWHT @ 760°C/2 hrs</td> <td></td> <td></td> </tr> </table>	Ultimate Tensile Strength	N/mm ²	620 Min.	Yield Stress/0.2% Proof Stress	N/mm ²	415 Min.	Elongation on 4D	%	17 Min.	Impact Energy CV @ +20°C	Joules	220 Typical	PWHT @ 760°C/2 hrs																													
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Wire Dia. (mm)		0.6mm	0.8mm	1.0mm	1.2mm	1.6mm	2.4mm	3.2mm
Current Range (Amps)	min.	-	-	-	-	60	80	100
	max.	-	-	-	-	180	200	240
Volt Range (Volts)	min.	-	-	-	-	-	-	-
	max.	-	-	-	-	-	-	-
Packaging Information								
Kg Per Tube		-	-	-	-	5	5	5
Storage	Storage It is recommended that the WB range of wires are stored in a dry heated store at a minimum temperature of 18°C, and a maximum relative humidity of 60%.							
Gases	Gas Pure Argon Flow Rate 12-14 L/min							

Current Conditions DC- and Welding Positions

